WHAT IS CLAIMED IS:

1. A method for the diagnosis of Alzheimer's disease in a patient, comprising the steps of:

(1) providing a sample of an appropriate body fluid from said patient, and

(2) detecting the presence of butyrylcholinesterase with an altered glycosylation pattern in said sample.

2. The method of claim 1 wherein the relative proportions of butyrylcholinesterase with a specific glycosylation pattern to the total butyrylcholinesterase are measured.

3. The method of claim 2 wherein the relative proportions of butyrylcholinesterase are measured using a lectin-binding analysis.

4. The method of claim 3 wherein the lectin-binding analysis includes measurement of butyrylcholinesterase binding to Concanavalin A.

5. The method of claim 4 wherein activity of unbound butyrylcholinesterase is determined.

6. The method of claim 5 further comprising the steps of:

(1) measuring the proportion of acetylcholinesterase binding to Concanavalin A,

(2) measuring the proportion of acetylcholinesterase binding to wheat germ agglutinin,

(3) determining the ratio of acetylcholinesterase unbound to Concanavalin A to acetylcholinesterase unbound to wheat germ agglutinin, and

(4) comparing the ratio with the relative proportion of butyrylcholinesterase unbound to Concanavalin A.

7. The method of Claim 6 wherein said ratio is above about 0.95 in Alzheimer's disease patients.

8. The method of Claim 6 wherein the total butyrylcholinesterase activity is determined.

9. The method of claim 8 wherein the proportion of butyrylcholinesterase unbound to Concanavalin A is plotted against the total butyrylcholinesterase activity, and the ratio of acetylcholinesterase unbound to Concanavalin A to acetylcholinesterase unbound to wheat germ agglutinin.

10. The method of claim 1 wherein a monoclonal antibody is used to detect the presence of butyrylcholinesterase with an altered glycosylation pattern.

11. The method of Claim 1 wherein an abnormal isoform of butyrylcholinesterase with an altered glycosylation pattern is detected.

12. The method of Claim 1 wherein said sample is cerebrospinal fluid, blood or blood plasma.

13. The method of claim 12 wherein said blood or blood plasma is prepared from the blood for analysis.

14. The method of claim 13 wherein said body fluid is blood plasma and butyrylcholinesterase is removed prior to analysis for the presence of acetylcholinesterase with an altered glycosylation pattern.

15. An abnormal isoform of butyrylcholinesterase with an altered glycosylation pattern and a lesser affinity for Concanavalin A and a greater affinity for wheat germ agglutinin than butyrylcholinesterase with an unaltered glycosylation pattern.

16. An abnormal isoform of butyrylcholinesterase with an altered glycosylation pattern and a lesser affinity for Concanavalin A and a greater affinity for wheat germ agglutinin than butyrylcholinesterase with an altered glycosylation pattern.

17. The method of Claim 8 wherein the ratio of butyrylcholinesterase unbound to Concanavalin A relative to the total butyrylcholinesterase is at least about eight percent.

18. The method of claim 15 wherein said body fluid is blood plasma and butyrylcholinesterase is inactivated prior to analysis for the presence of acetylcholinesterase with an altered glycosylation pattern.